

ABSTRACT

The present invention provides the mPrickle gene which encodes a protein present in mammalian PSD fractions. The mPrickle protein is localized in synapses, and binds to the scaffold protein PSD-95. Precipitation of endogenous mPrickle using an anti-mPrickle antibody results in the coprecipitation of NMDA receptors, and thus, mPrickle can be used in drug delivery systems that target NMDA receptors. NMDA receptors are closely related to learning and memory, and are also suggested to be involved in mental disorders. Thus, in the future, mPrickle is expected to be applicable to the diagnosis and/or treatment of neurodegenerative diseases associated with learning/memory, such as mental deterioration and dementia.